



## Attorney Docket No. 13533/48003

#### PATENT APPLICATION

THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of: Peter BRINK et al.

Group Art Unit: 1632

Application No.: 10/757,827

Examiner: Singh, Anoop Kumar

Filed: January 15, 2004

For: MESENCHYMAL STEM CELLS AS A VEHICLE FOR

ION CHANNEL TRANSFER

## INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Pursuant to 37 CFR § 1.56, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO-1449. Unless otherwise indicated herein, one copy of each reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom. The filing of this Information Disclosure Statement and the enclosed PTO Form No. 1449, shall not be construed as an admission that the information cited is prior art, or is considered to be material to patentability as defined in 37 C.F.R. § 1.56(b). The paragraphs marked below are applicable. It is believed that no fees other than those indicated below are due, but authorization is hereby given to charge any additional fees due, or to credit any overpayment, to deposit account 11-0600.

This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a final action, Notice of Allowance, or any action that otherwise closes prosecution.

I hereby certify that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(1). However, please debit Deposit Account No. 11-0600 (under order no. 13533/48003) in the amount of \$180.00 in payment of the fee under 37 CFR §1.17(p) to ensure consideration of the disclosed information. Two duplicate copies of this paper are attached. 37 CFR §1.97(c)(2).

The references were cited in a counterpart foreign application. A copy of the Office Action dated February 6, 2006 is attached. An English language version of the foreign search report is also attached for the Examiner's information.

Respectfully submitted,

**KENYON & KENYON LLP** 

Date: May 10, 2006

Teresa A. Lavenue Reg. No. 47737

Kenyon & Kenyon LLP 1500 K Street, N.W. Washington, D.C. 20005 Telephone: (202) 220-4200 Facsimile: (202) 220-4201

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Facsimile: (202) 220-4201

PTO/SB/08A (07-05)

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Sheet of 2

Complete if Known		
Application Number	10/757,827	
Filing Date	January 15, 2004	
First Named Inventor	Peter BRINK et al.	
Art Unit	1632	
Examiner Name	Singh, Anoop Kumar	
Attorney Docket Number	13533/48003	

	U.S. PATENT DOCUMENTS					
Examiner Cite No.1	Cito	Cite Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant	
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	FOREIGN PATENT DOCUMENTS					
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Examiner Cite Initials* No.1	Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear	T <sup>6</sup>	
	1	WO 02/098286 A2	12-12-2002	Rosen et al.		Х
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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Complete if Known Application Number 10/342,506 January 15, 2003 Filing Date Peter BRINK et al. First Named Inventor Art Unit 1633 Kaushal, Sumesh Examiner Name

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13533/48002 Sheet of Attorney Docket Number

	NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²		
	1	Jihong Qu et al., HCN2 Channel Overexpression in Rat Ventricle via Adenovirus-Mediated Gene Transfer, Circulation, Vol. 104, Oct. 2001, page II-133			
<del>-</del>	2	Arjang Ruhparwar et al., Transplanted fetal cardiomyocytes as cardiac pacemarker, European Journal of Cardiothoracic Surgery , Vol. 21, May 2002, pages 853-857			
	3	Catalin Toma et al., Human Mesenchymal Stem Cells Differentiate to a Cardiomyocyte Phenotype in the Adult Murine Heart, Circulatin, Vol. 105, Jan. 2002, pages 93-98			
	4	Bodo E. Strauer, Repair of Infracted Myocardium by Autologous Intracoronary Mononuclear Bone Marrow Cell Transplatation in Humans, Circulation, Vol. 106, Oct. 2002, pages 1913-1918			
-	5	L. Vaca et al., Mutations in the S4 domain of a pacemarker channel alter its voltage dependence, FEBS Letters, Vol. 479, Aug. 2000, pages 35-40			
-	6	Alexei Plotnikov et al., Human Mesenchymal Stem Cells Transfected with HCN2 as a Gene Delivery System to Induce Pacemaker Function in Canine Heart, Circulation, Vol. 108, Oct. 2003, p. IV-547			

Examiner	Date
Signature	Considered

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in

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